RECOMMENDATIONS

1. **Preparation.**

   (a) The most critical element when preparing for a review or workshop is the development of a clear set of objectives that accurately defines the purpose of the meeting and the anticipated end product. Since the nature of reviews and workshops is so diverse, ranging anywhere from a "brainstorming" session for development of new ideas, to a critical assessment leading to resource redirections, no two activities will have precisely the same set of objectives or format.

   (b) The National Program Leader(s) responsible for a review or workshop should contact the Area Office(s), RL's, and leading ARS scientists to formulate the meeting objectives. These objectives should be approved by the appropriate Associate Deputy Administrator and cataloged with an official designation before proceeding further. At this point, the Associate Deputy Administrator may provide special guidelines for implementation to meet particular requirements.

   (c) After approval of objectives, a steering committee should be appointed to develop the agenda, identify the format, select the location, and invite the participants. The steering committee should, whenever possible, consist of the appropriate NPL, the RL of the host location, and a sufficient representation of RL's or scientists to meet the objectives of the workshop. With guidance from the ADA, where indicated, and approval by the NPL, the steering committee will then proceed with preparations keeping in mind that: (1) the duration of the meeting should be as short as possible to accomplish the stated objectives; (2) the location of the review or workshop should be central to the problem being addressed, but with consideration to reduce travel costs as much as possible; and (3) the participants should include all relevant ARS scientists, RL's, cooperating scientists from academic institutions, and industry representatives, depending on the objectives of the meeting. Workshops on research to meet priority needs of sister agencies, such as SCS, FSIS, or APHIS, should be jointly planned to fully accommodate the requirements of both organizations.

2. **Conduct**

   (a) Reviews and workshops should be conducted in such a manner as to fulfill the approved objectives through the established agenda. Background materials, sent to all participants in advance of the meeting, will help to expedite the proceedings and assure that relevant issues and viewpoints are not overlooked. Specific subject matter assignments to participants in advance of the meeting often help to keep the deliberations on track. Furthermore, such assignments may provide opportunities to develop the leadership skills of RL's and scientists.

(b) A Recording Secretary should be appointed by the Workshop Chairperson and assigned the responsibility for producing the final report in a timely manner. A draft of the report should be circulated to all participants prior to completing the final version. It may be desirable to also appoint rapporteurs to assist the Recording Secretary with specific components of the workshop agenda.

(c) Travel costs incurred in the execution of a review or workshop should be the responsibility of the Research Units, Area offices, and National Program Leaders participating in the meeting.

3. **Follow-Through**

(a) The final report is the end product of the review or workshop that permits follow-through activities. It should be concise, include a 1-page executive summary at the beginning, identify action items with due dates and responsible individuals, and provide long-term recommendations that will help guide the activities of line and staff officials.

(b) Within 60 days of the review or workshop (unless otherwise specified in the implementation guidelines) the final report should be distributed to the participants, the Deputy Administrator, Associate Deputy Administrators, appropriate Area Directors, and relevant National Program Leaders.

(c) Action items and other follow-up activities identified in the final report should be implemented, and consideration should be given to those long-term recommendations that will impact line and staff decisions in the future.

NPS
3-3-89

MINI-WORKSHOP ON SCREWWORM ECOLOGY IN THE TROPICS

OBJECTIVES:

Initiate ARS research toward the development of a population dynamics model of the screwworm in the tropics:

1. Review the present status of research on the ecology of the screwworm in the tropics, especially as related to the population dynamics of the insect.
2. Review the concepts of and approaches to modeling insect population dynamics.
3. Identify the needs to develop a population dynamics model for the screwworm in the tropics.
4. Establish priorities and define requirements for the successful completion of the research, including cooperative interaction.

LOCATION: EJN Experiment Station (MAG), Canas, Costa Rica

DATE: May 10-11, 1991

PARTICIPANTS:

R. Bram, USDA-ARS-NPS, Beltsville, MD
E. Gersabeck, USDA-APHIS-NPS, Hyattsville, MD
F. Horn, Area Director, USDA-ARS-SPA, College Station, TX
D. Haile, Agric. Engineer, USDA-ARS-IAMARL, Gainesville, FL
J. Whitten, RL, Screwworm Research Lab, Tuxtla Gutierrez, Chiapas, Mexico
D. Thomas, Res. Entomologist, Screwworm Research Lab., Tuxtla Gutierrez, Chiapas, Mexico
F. Parker, Res. Entomologist, Screwworm Research Lab., San Jose, Costa Rica
J. Welch, Res. Entomologist, Screwworm Research Lab., San Jose, Costa Rica
R. Matlock, Res. Entomologist, Screwworm Research Lab., San Jose, Costa Rica.

AGENDA

May 10 a.m.	Workshop Opening Statements	J. Whitten (Moderator)
	Present Status of Ecology Research	
	Field Behavior of the Screwworm	D. Thomas
	Field Biology of the Screwworm	J. Welch
	Population Dynamics of the Screwworm in the Field	F. Parker
	Concepts in Modeling Insect Populations	
	Steps in Developing a Model	D. Haile
	Needs in Developing a Model	R. Matlock
	Remote Sensing Applications	J. Welch
May 10 p.m.	Program needs and Application of a Population Dynamics Model	E. Gersabeck
	Identification of Areas of Research Necessary for Developing a Population Dynamics Model for the Screwworm	All
	Establish Priorities and Resources	All
	Areas of Cooperation and Interaction	All
	Workshop Summary	Bram
	Dinner in Canas	All
May 11 a.m.	Completion of Workshop (if necessary)	
	Tour of Experiment Station and Lab.	
May 11 p.m.	Return to San Jose	

AGENDA

May 10 a.m.	Workshop Opening Statements (Moderator)	J. Whitten
	Present Status of Ecology Research	
	Field Behavior of the Screwworm	D. Thomas
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	Needs in Developing a Model	R. Matlock
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May 10 p.m.	Program needs and Application of a Population Dynamics Model	E. Gerasbeck
	Identification of Areas of Research Necessary for Developing a Population Dynamics Model for the Screwworm	All
	Establish Priorities and Resources	All
	Areas of Cooperation and Interaction	All
	Workshop Summary	Bram
	Dinner in Cana	All
May 11 a.m.	Completion of Workshop (if necessary)	
	Tour of Experiment Station and lab.	
May 11 p.m.	Return to San Jose	

SCREWWORM ECOLOGY WORKSHOP
COSTA RICA
10 - 11 MAY 1991

1. Adult population density in small patches of forest (≤ 1 h) or corridors versus larger forest stands.

2. Influence of meteorological factors such as relative humidity, barometric pressure (how does barometric pressure [when there is no fly activity] relate to Mackley's mountain study?) and solar radiation on screwworm population dynamics, distribution, and dispersal.

3. Microclimate\habitat preferences of adult screwworms. Why are more flies collected at some sites than others (abiotic factors such as temperatures, humidity, and light; biotic factors such as animal and plant sources of food and oviposition sites).

4. Adult emergence in the field (wet and dry tropical forest and pasture habitats during wet and dry seasons).

5. Influence of edaphic factors such as soil type (sand, loam, silt, clay) on adult emergence from wet and dry tropical forest and pasture habitats during wet and dry seasons.

6. Incidence of adult screwworms in marshlands.

7. Possible effect of burning on dispersal and distribution of screwworm populations.

8. Identification of screwworm bloodmeals from tropical habitats (wet, dry, urban, agricultural, etc.) during wet and dry seasons.

9. Determination of glycogen and sugars in adult screwworms.

10. As the complex tropical ecosystem shifts to a more simple agroecosystem, will screwworm pressure on man and domestic animals increase, or will screwworm populations crash (or both) due to a loss of sylvatic hosts (especially in the barrier zone)?

11. Investigate possible differences in screwworm fecundity and natality during wet and dry seasons in wet and dry tropical habitats (possible relation to animal and plant sources of food quantity and quality).

12. Interact with scientists studying or collecting mammals in tropical environments.

13. Bait or feeding stations for adult screwworms (not broadcast such as SWASS).

14. Model for prediction of adult population density (habitat, season).

15. Model for prediction of adult emergence (soil type, habitat, season).

16. Investigate response of screwworm adults to ultraviolet and infrared (trap design and collecting techniques).

17. Increase effort into the development of better attractants (standardized and more efficient) and traps.

18. Field test with sterilized flies released at the current rate over forested areas and lower rate over pasture/nonforested areas (e.g., 1,313 flies per km^2 over forest and 132 flies per km^2 over nonforested areas) (or go to a nonforested area and drop flies at a rate of 132/km^2).

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19. Release adult flies (singly or 3-4 simultaneously) equipped with microchips and follow movement using radio telemetry within a small patch of forest surrounded by extensive pasture or nonforested land.

20. Release adult flies (singly or 3-4 simultaneously) equipped with microchips and follow movement using radio telemetry on a small island with both forest and nonforested areas.

21. Conduct (temporal) nocturnal thermal infrared scans or surveys with night vision equipment of screwworm habitat to locate warmblooded hosts, while conducting concurrent radio telemetry and diurnal sampling to detect possible movement of screwworm populations in association with host movements.

SENT 13:50 P.M.

United States Department of Agriculture
Agricultural Research Service
Southern Plains Area
Screwworm Research Laboratory
Tuxtla Gutierrez, Chiapas, Mexico

FAX Number:
Within Mexico (961)-3-07-67
International 52-(961)-3-07-67

FAX TRANSMISSION

TO: Dr. Ralph Bram

FROM: Jim Whitten

SUBJECT: ARS Meetings - Costa Rica/Mexico

DATE: 4/15/91

REMARKS: Attn: Pat K. - Please a copy of this to Ed Gersabeck. We have made hotel reservations for him everywhere except Tuxtla -
Thnx

PAGES SENT INCLUDING THIS COVER SHEET: Five (5)

IF THIS TRANSMISSION WAS NOT RECEIVED IN ITS ENTIRETY PLEASE NOTIFY US IMMEDIATELY. TELEPHONE #(961)-3-35-50 (Within Mexico)
52-(961)-3-35-50 (International)

United States Department of Agriculture
Agricultural Research Service
Southern Plains Area
Screwworm Research Laboratory
Tuxtla Gutierrez, Chiapas, Mesico

April 12, 1991

SUBJECT: Status of ARS Screwworm Meetings, May 8-15

TO: All Participants

FROM: C.J. Whitten

The plans for the forthcoming meeting involving screwworm research activities are almost complete. Attached is a general schedule for the time period May 8-15 and the agenda for the Ecology Workshop to be held in Costa Rica on May 10. The agenda for the ARS-Methods Planning meeting has not yet been finalized, but will be sent to you at a later date.

I have tried to include telephone numbers for contact points at each location. The number for the ARS laboratory in Tuxtla Gutierrez is 011-52-961-33550, FAX - 011-52-961-30767. My home number is 011-52-961-36750. The best contact point for Costa Rica will be John Welch's home - 011-506-32-51-12 or the U.S. Embassy - 011-506-20-39-39.

All hotel reservations have been made. Arrangements have been made for you to be met at the arrival of your flights in Costa Rica and Tuxtla Gutierrez. With the possible exception of your flights to and from the U.S., we will be traveling in groups.

Please let me know if you have any questions or anticipate any problems.

GENERAL SCHEDULE FOR ARS MEETINGS, MAY 8-15

May 6 -8	Arrivals - San Jose, Costa Rica, Hotel Corobici (Ph 011-506-32-81-22)
May 9 - a.m.	Meeting of selected personnel with Deputy Chief of Mission and Agricultural Attache at U.S. Embassy, San Jose.
May 9 - p.m.	Travel to Canas, Costa Rica, Hotel La Pacifica (Ph. 011-506-69-00-50)
May 10 -	ARS Mini-Workshop on Screwworm Ecology (Agenda attached)
May 11 - a.m.	Completion of workshop and tour of MAG experiment station
May 11 - p.m.	Return to San Jose, Hotel Corobici (Ph. 011-506-32-81-22)
May 12	Flight from San Jose to Mexico City, Hotel Bristol (Ph 011-525-208-1717) or Hotel Maria Cristina (Ph 011-525-566-9688)
May 13 - a.m.	Flight from Mexico City to Tuxtla Gutierrez, Hotel Arecas (Ph 011-52-961-32467)
May 13 - p.m.	Tour of Screwworm Production Plant
May 13 - nite	Dinner at Palapa Balam
May 14 -	ARS Planning meeting, ARS laboratory
May 14 - nite	Dinner at Whitten's
May 15 -	Annual ARS-Methods Development Planning Meeting, Commission Meeting Room
May 15 - nite	Dinner at the Ganadero
May 16 - 18	Transportation to airport

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May 13 - a.m.	Flight from Mexico City to Tuxtla Gutierrez, Hotel Arecas (Ph 011-52-961-32467)
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United States Department of Agriculture
Agricultural Research Service
Southern Plains Area
Screwworm Research Laboratory
Tuxtla Gutierrez, Chiapas, Mexico

FAX Number:
Within Mexico (961)-3-07-67
International 52-(961)-3-07-67

FAX TRANSMISSION

TO: Drs. Robert Matlock & Dave Taylor

FROM: Jim Whitten

SUBJECT: ARS Meetings - Costa Rica/Mexico

DATE: 4/15/91

REMARKS: Dave - Tommy has already made your reservations at the Maria Cristina - Please advise

PAGES SENT INCLUDING THIS COVER SHEET: Five (5)

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Sent

United States Department of Agriculture

Agricultural Research Service

Southern Plains Area

Screwworm Research Laboratory
Tuxtla Gutierrez, Chiapas, Mexico

FAX Number:
Within Mexico (961)-3-07-67
International 52-(961)-3-07-67

FAX TRANSMISSION

TO: Dr. Dan Haile 904-374-5818

FROM: Jim Whitten

SUBJECT: ARS Meetings - Costa Rica / Mexico

DATE: 4/15/91

REMARKS:

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SENT 12:50 p.m

United States Department of Agriculture
Agricultural Research Service
Southern Plains Area
Screwworm Research Laboratory
Tuxtla Gutierrez, Chiapas, Mexico

FAX Number:
Within Mexico (961)-3-07-67
International 52-(961)-3-07-67

To: Taylor/Mattock in Fargo 1:30 PM

FAX TRANSMISSION

TO: Dr Floyd Horn / June Williams

FROM: Jim Whitten

SUBJECT: ARS Meetings - Costa Rica/Mexico

DATE: 4/15/91

REMARKS: Please send June W. a copy of this.

Thnx

PAGES SENT INCLUDING THIS COVER SHEET: Five (5)

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United States Department of Agriculture
Agricultural Research Service
Southern Plains Area
Screwworm Research Laboratory
Tuxtla Gutierrez, Chiapas, Mexico

FAX Number:
Within Mexico (961)-3-07-67
International 52-(961)-3-07-67

FAX TRANSMISSION

TO: D. Taylor / R. Matlock

FROM: J. Whitten

SUBJECT: May meetings Mexico / Costa Rica

DATE: April 15, 1991

REMARKS: Agenda / Travel Itineraries attached.

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52-(961)-3-35-50 (International)

Ecology

What we know — Field Behavior (Thomas ↔ Welch)
Biology
Dynamics — Parker

What we need — Models (steps in development) — Haule
Needs — Matlock
? — Environment

Priority — Field

904-374-5941
28

Priority — Lab
biology — FAX ~~5181~~ 5818

Verification

Objective -

To determine & prioritize the needs for developing a population dynamics model for the screw-worm in the Tropics

98
295 | 290080
26550
24580
23600

United States Department of Agriculture
Agricultural Research Service
National Program Staff
Beltsville, Maryland 20705

February 4, 1991

RECEIVED
FEB - 7 1991
AREA OFFICE

SUBJECT: Screwworm Ecology Minireview

TO: C. J. Whitten, RL
Screwworm Research, Tuxtla Gutierrez, Mexico

THROUGH: F. P. Horn, AD, SPA

FROM: R. A. Bram, NPL, Medical & Veterinary Entomology and Parasitology

With the recent approval of a screwworm ecology minireview for CY 1991 and in accordance with our several conversations on this subject, I wish to request that you assume leadership in developing, implementing, and reporting the results of a minireview on screwworm ecology. This assignment would be conducted on behalf of the National Program Staff.

Enclosed for your information and consideration, please find recommendations for ARS Reviews and Workshops. I will work with you to assure that necessary authorizations for international travel are received in sufficient time for the May 10, 1991, meeting in Canas.

Thanks for agreeing to take responsibility for this important project. It is reassuring to know that NPS can call upon experienced technical expertise to help guide the future directions of our national programs.

Enclosure

cc:
R. R. Oltjen